National Institute of Environmental Health Sciences

Contribution of climate and air pollution to variation in coronary heart disease mortality rates in England

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Abstract:

There are substantial geographic variations in coronary heart disease (CHD) mortality rates in England that may in part be due to differences in climate and air pollution. An ecological cross-sectional multi-level analysis of male and female CHD mortality rates in all wards in England (1999-2004) was conducted to estimate the relative strength of the association between CHD mortality rates and three aspects of the physical environment - temperature, hours of sunshine and air quality. Models were adjusted for deprivation, an index measuring the healthiness of the lifestyle of populations, and urbanicity. In the fully adjusted model, air quality was not significantly associated with CHD mortality rates, but temperature and sunshine were both significantly negatively associated (p

Source: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3299689

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Solar Radiation

Air Pollution: Interaction with Temperature, Particulate Matter, Other Air Pollution

Air Pollution (other): benzene, NO2, SO2

Geographic Feature:

resource focuses on specific type of geography

Ocean/Coastal, Rural, Urban

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Europe

European Region/Country: European Country

Other European Country : United Kingdom

Health Impact: ☒

specification of health effect or disease related to climate change exposure

Cardiovascular Effect

Cardiovascular Effect: Other Cardiovascular Effect

Cardiovascular Disease (other): coronary heart disease mortality

Population of Concern: A focus of content

Population of Concern: ☒

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status

Resource Type: ☒

format or standard characteristic of resource

Research Article

Timescale: ☒

time period studied

Time Scale Unspecified